

ATTACHMENT B

Amendments to the Claims

This listing of claims will replace all prior versions, and listings, of claims in the application.

1. (Currently Amended) An instrument for inserting into an intervertebral space an intervertebral implant having a top, which in the intervertebral space engages one vertebral surface, and having a bottom which in the intervertebral space engages the other vertebral surface, comprising:

a pair of arms connected to each other and including an upper arm and a lower arm, said arms being constructed to close towards each other to enter recesses in the top and bottom of the implant, respectively, to secure an intervertebral implant therebetween and separable away from each other for removal from the intervertebral implant,

each arm at least one of said arms including at its outer end a recess engaging portion adapted to be inserted in a recess of the intervertebral implant positively engaging structure which is shaped to mate with a matching positively engaging structure in its corresponding implant recess to prevent movement of that arm out of the recess in a direction perpendicular to the closing and separating direction of that arm.

2-9. (Canceled)

10. (Currently Amended) An instrument according to claim 1, wherein the upper and lower arms are pivotally connected to each other intermediate between the forward outer ends which engage the implant and the rear opposite ends thereof.

11. (Original) An instrument according to claim 10, including a spacer mounted between the upper and lower arms for engaging the implant as the upper and lower arms secure the implant.

12. (Original) An instrument according to claim 11, wherein the spacer is removably mounted in the instrument such that different size spacers can be used.

13. (Currently Amended) An instrument according to claim 11, including a spacer tube located generally coplanar with the upper and lower arms at the forward outer ends thereof and located therebetween.

14. (Original) An instrument according to claim 13, including a spacer removably mounted in the spacer tube such that its forward end engages the implant.

15. (Original) An instrument according to claim 14, wherein the spacer is sufficiently thick to move the upper part to a lordosis angle.

16. (Original) An instrument according to claim 14, wherein the spacer is sufficiently thin to allow the upper part to move to a kyphosis angle.

17. (Original) An instrument according to claim 11, including flat portions on the upper and lower arms to engage the spacer as the arms are moved together.

18. (Original) An instrument according to claim 17, including engaging means between the spacer and its adjacent flat portions.

19. (Currently Amended) An instrument for inserting an intervertebral implant into an intervertebral space, comprising:

a pair of arms including an upper arm and a lower arm, ~~said arms having forward ends and constructed to secure upper and lower parts of an intervertebral implant at said ends~~ the upper arm having a structure at a forward end thereof to secure thereto an upper part of the implant and the lower arm having a structure at a forward end thereof to secure a lower part of the implant, and

a spacer located between the arms and being movable relative to both of the upper and lower arms ~~and constructed arms, the instrument having a structure to move the spacer between the upper and lower parts to limit of the implant, thus limiting~~ movement of the upper and lower parts towards each other.

20. (Previously Presented) An instrument according to claim 19, wherein the upper and lower arms are pivotally connected to each other rearward of said forward ends.

21. (Original) An instrument according to claim 20, wherein the spacer is removably mounted in the instrument such that different size spacers can be used.

22. (Original) An instrument according to claim 21, including a spacer tube located generally coplanar with the upper and lower arms and located therebetween, and including a spacer removably mounted in the spacer tube such that its forward end engages the implant.

23. (Original) An instrument according to claim 22, including flat portions on the upper and lower arms which engage the spacer as the arms close together.

24. (Currently Amended) An instrument, in combination with an intervertebral implant, ~~for insertion of the intervertebral implant having which has~~ upper and lower parts which engage each other for relative movement therebetween, ~~for insertion~~ into an intervertebral space, comprising:

~~an wherein the intervertebral implant having has a top of the upper part, which in the intervertebral space, engages one vertebral surface, and having a bottom of the lower part, which in the intervertebral space engages the other vertebral surface; and surface, each of the implant parts further having a raised keel on its respective top and bottom, each of which keels has a recess therein,~~

~~and including a pair of arms pivotally including an upper arm and a lower arm connected together at a single pivot connection such that the arms move relative to each other about said pivot connection in the manner of a scissors, and including an~~

upper arm and a lower arm at the forward ends, said arms at the forward ends being constructed to close in a vertical direction towards each other to secure the upper and lower parts of the intervertebral implant therebetween and to separate in a vertical direction away from each other for release from the intervertebral implant other, each arm having a forward end, the instrument having a structure which causes said forward ends to close towards each other to engage the keel recesses to secure the upper and lower parts of the intervertebral implant therebetween and to separate away from each other for release from the intervertebral implant.

25. (Original) An instrument according to claim 24, including a spacer located between the arms to limit movement of the upper and lower parts towards each other.

26. (Original) An instrument according to claim 25, including a spacer tube generally coplanar with the upper and lower arms and located therebetween for receiving the spacer.

27-29. (Canceled)

30. (Previously Presented) A method of inserting into an intervertebral space an intervertebral implant having upper and lower parts which engage each other for relative movement therebetween, the upper part having an upwardly facing open upper recess and the lower part having a downwardly facing open lower recess, comprising the steps of:

moving the forward ends of an insertion instrument into the upwardly and downwardly facing open recesses of the intervertebral implant such that the ends of the arms of the insertion instrument securely hold the intervertebral implant while urging the upper and lower parts towards each other,

moving the insertion instrument with the implant held therein into the intervertebral space,

and then removing the ends of the arms from the recesses and hence from the implant.

31. (Original) A method according to claim 30, including, prior to said step of moving the ends into the recesses of the intervertebral implant, separating the arms of the insertion instrument away from each other, and placing an intervertebral implant into the space between the arms.

32-38. (Canceled)

39. (Original) A method according to claim 30, wherein the recesses and the ends of the arms have cooperating structures to positively engage each other in the direction perpendicular to the direction of movement into the intervertebral space, and the step of closing the ends in the recesses causes engagement of such positively engaging structures, and the step of slightly separating the arms from each other comprising disengaging the positive engaging structures.

40. (Original) A method according to claim 39, wherein the positively engaging structure comprises a projection on each end and an indentation formed in the base of each recess.

41. (Currently Amended) A method of inserting into an intervertebral space an intervertebral implant having upper and lower parts which are movable relative to each other, comprising the steps of:

securing the upper and lower parts of the implant to upper and lower arms of an insertion instrument, placing a spacer which is located between the upper and lower arms partially into ~~the~~a space between the upper and lower parts to limit of the implant, thus limiting movement of the upper and lower parts towards each other in the vicinity of the spacer.

42. (Original) A method according to claim 41, including supporting the spacer on the insertion instrument between the upper and lower arms.

43. (Original) A method according to claim 42, including supporting the spacer in a spacer tube fixed to the insertion instrument.

44. (Original) A method according to claim 43, wherein the spacer is removably mounted in the spacer tube, and the method includes selecting a spacer of a size appropriate to the size of the implant.

45. (Original) A method according to claim 41, wherein the step of securing the upper and lower parts of the implant includes moving the upper and lower arms in a circular path in a scissors like manner about a single pivot axis.

46. (Currently Amended) A method of inserting into an intervertebral space an intervertebral implant having upper and lower parts which are movable relative to each other, comprising the steps of:

locating the lower part of the implant on the lower arm of an insertion instrument,
moving a spacer onto a portion of the lower part,
locating the implant upper part on the upper arm of the insertion instrument, and
moving the upper and lower arms together to secure the implant, with the spacer located between the upper and lower parts to limit of the implant, thus limiting movement of the upper and lower parts together in the vicinity of the spacer.

47. (Original) A method according to claim 46, including moving the implant, secured by the arms of the insertion instrument, with the spacer in place, into an intervertebral space and subsequently removing the insertion instrument from the intervertebral space, leaving the implant within the intervertebral space.

48. (Currently Amended) A method of inserting into an intervertebral space an intervertebral implant having upper and lower parts which are separable from each other and movable relative to each other, the method comprising the steps of:

securing the upper and lower parts of an intervertebral implant together with upper and lower arms of an insertion instrument which, which engages, respectively, recesses in the upper and lower parts, wherein the arms move in a circular path, in a scissors like manner, about a single pivot axis.

49. (Original) A method according to claim 48, including positioning a spacer between the upper and lower arms, with a portion thereof located between the upper and lower parts to limit movement of the upper and lower parts towards each other in the vicinity of the spacer.

50. (Original) A method according to claim 49, wherein the spacer is dimensioned to create a lordosis angle between the upper and lower parts.

51. (Original) A method according to claim 49, wherein the spacer is dimensioned to create a kyphosis angle between the upper and lower parts.

52. (Original) A method according to claim 48, including moving the forwardmost ends of the arms into recesses formed in the upper and lower parts.

53. (Currently Amended) An instrument for inserting into an intervertebral space an implant of the type having upper and lower parts in operative engagement with each other for relative movement therebetween, comprising:

upper and lower arms;

the upper arm having a free end which has a structure for engaging to secure the upper part;

the lower arm having a free end which has a structure for engaging to secure the lower part; and

a spacer located between the upper and lower arms and being movable relative to both of the upper and lower arms, said spacer being movable the instrument having a structure to move the spacer into a space between the upper and lower parts to limit of the implant, thus limiting movement of the upper and lower parts towards each other in the vicinity of the spacer.

54. (Previously Presented) An instrument according to claim 53, wherein the arms are constructed to be moveable, after engaging the upper and lower parts, to secure their said free ends to the upper and lower parts.

55. (Previously Presented) An instrument according to claim 53, wherein the spacer is mounted to be movable substantially parallel to the length of the arms, into and out of the space between the upper and lower parts.

56. (Previously Presented) An instrument according to claim 53, wherein the arms include, at their free ends, projections which are constructed to engage indentations in the upper and lower parts.

57. (Previously Presented) An instrument according to claim 53, wherein the free ends of the arms are movable about a pivot axis towards each other to engage the upper and lower parts.

58. (Previously Presented) In combination:

an instrument for inserting an intervertebral implant into an intervertebral space;

upper and lower arms;

an implant having upper and lower parts in operative engagement with each other for relative movement therebetween;

an upper arm having a free end which has a structure for engaging the upper part;

the lower arm having a free end which has a structure for engaging the lower part; and

a spacer located between the upper and lower arms and being movable relative to both of the upper and lower arms, said spacer being moveable into a space between the upper and lower parts to limit movement of the upper and lower parts towards each other in the vicinity of the spacer.

59. (Previously Presented) The combination of claim 58, wherein the arms are constructed to be moveable, after engaging the upper and lower parts, to secure their said free ends to the upper and lower parts.

60. (Previously Presented) The combination of claim 58, wherein the spacer is mounted to be movable substantially parallel to the length of the arms, into and out of the space between the upper and lower parts.

61. (Previously Presented) The combination of claim 58, wherein the arms include, at their free ends, projections which engage indentations in the upper and lower parts.

62. (Previously Presented) The combination of claim 58, wherein the free ends of the arms are movable about a pivot axis towards each other to engage the upper and lower parts.

63. (Currently Amended) A method for inserting into an intervertebral space an implant of the type having upper and lower parts in operative engagement with each other for relative movement therebetween, comprising:

placing a spacer between upper and lower arms of an insertion instrument;
engaging the upper part with the free end of the upper arm;
engaging the lower part with the free end of the lower arm; and
moving the spacer in between the upper and lower parts to limit of the implant,
thus limiting movement of the upper and lower parts towards each other in the vicinity of the spacer.

64. (Previously Presented) The method according to claim 63, including the step of securing the free ends of the upper and lower arms with the upper and lower parts.

65. (Previously Presented) The method according to claim 63, wherein the spacer is located between the upper and lower arms, and the step of moving the spacer includes moving it substantially parallel to the length of the arms.

66. (Previously Presented) The method according to claim 63, wherein the step of engaging the upper and lower arms with the upper and lower parts includes moving the projections of the arms into indentations in the upper and lower parts.

67. (Previously Presented) The method according to claim 66, wherein the arms move about a pivot axis to move the projections into the indentations.

68. (New) An instrument according to claim 1, wherein both of said arms have positively engaging structures and both of said implant recesses have a matching engaging structure.

69. (New) An instrument according to claim 1, wherein one of said positively engaging structures is a projection and the matching positively engaging structure is a matching indentation.

70. (New) An instrument according to claim 69, wherein the projection is formed on the at least one of said arms and the matching indentation is formed in its corresponding implant recess.

71. (New) The combination according to claim 24, wherein the forward ends of the arms enter the keel recesses when securing the upper and lower parts.

72. (New) The combination according to claim 71, wherein the height of the forward ends is less than the depth of the keel recesses, such that as the forward ends release from securing engagement with their respective parts, they can be moved laterally out of the recesses without the tops of the arms being located higher than the tops of the keel recesses.

73. (New) The combination according to claim 72, each arm and its respective recess having a projection on one of them and a matching indentation on the other of them, and wherein, upon release, the projection and indentation separate from each other such that the arms can be moved laterally out of their respective recesses.

74. (New) The combination according to claim 73, wherein the projections are formed on the arms and the matching indentations are formed in the keel recesses.